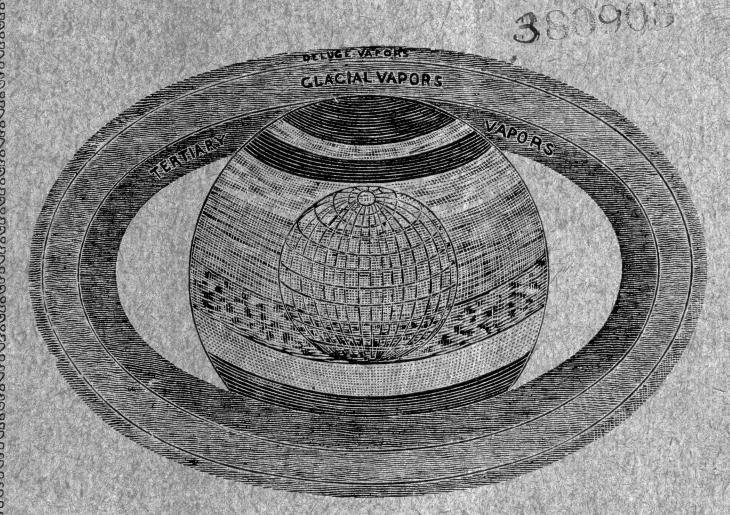
ALASKA.

Land of the Nugget. Why?

By I. N. VAIL,

EDITOR OF THE "ANNULAR WORLD."



A Critical Examination of Geological and other Testimony, showing how and why Gold Was Deposited in Polar Lands.

PASADENA, CAL.,
PRESS OF G. A. SWERDFIGER.
1897.

Copyrighted 1897, by I. N. VAIL.



Smithsonian

Libraries and Archives

I ha
a "cliff
glyphs,
from the
a full ex
subscrib
beginnin
wonderf
cials of
pretatio

In

"Y

"T

"T

serve."

testimo

Adopted for Conservation by

Alan Kabat

March 6, 2018

Marc

found in ler hieroy vapors
let, with d-up subper year)
ts. This
The offiits inter-

housand

OWEN.

they de-

"I have read your thoughts with the keenest relish. They are ahead of anything else I have seen." REV. D. EVANS.

Box 279, Iowa City, Iowa.

"I can now at the age of 82, see light through the rift in the clouds hanging over the deluge." E. P. INGERSOLL. Springfield, Kan.

"Your views have given me more light on Genesis and creation than all else I ever read."

G. W. OGDEN.

Prosperity, W. Va.

"I've been an M. E. minister for 30 years. In all my search I have seen nothing that pleases me so much as your thoughts."

REV. J. N. PARR, M. D.

"And above all the Hand Divine is not lost sight of."

San Diego, Cal.

CARRIE WILLIAMS.

"I believe you are bringing a great truth to the knowledge of the world."

H. M. SHIPMAN.

Alliance, Ohio.

"Your ideas must lead up to a correct theology." Swauger, Cal.

D. WHITE.

Address all orders to I. N. VAIL,

Editor Annular World,

PASADENA, CAL.

ALASKA.

The Land of the Nugget. Why?

and he who learns as a philosopher learns, learns to unlearn and prizes the opportunity to "let go" as theories begin to sink in the great ocean of error. I believe there is a road that "leads to all truth." The time may come when men travelling that road can mount the stepping stones that lead up to Truth's grand Citadel. We have seen theories come and go, as mere ephemeral upheavals in the sea of time, and I here present another. This of course is planted on time's eternal sills—a thing not born to die, and in the day its overshadowing branches fill mankind's sky there may be "no darkness at all."

I wish to use the world-wide interest now taken in the North-world gold problem to disseminate a few original thoughts among thinking men, as well as among those who will heedlessly rush into the perils to be encountered in the nugget lands of the Arctic World. I ask the reader to follow carefully and patiently the line of argument I am about to pursue, and which I have been presenting on all suitable occasions for more than a quarter of a century. At the end of this treatise on Alaskan gold, the reader will find some verbal quotations from my published writings, which will convince him that this theory

of world-making and gold-planting here presented, is not now given for the first time, and that the discovery of rich gold fields in the frozen North did not give it birth. It is no ex post factor production. Its birth dates back into the sixties when the writer as a young man lectured on this theme; and there are many of his pupils who will gladly testify that the Annular Theory was their teacher's "hobby" then.

The idea presented in brief, is, that this planet of ours once had a system of rings, as the planet Saturn has I have called it the Annular Theory from the Latin word annulus a ring. It first suggested itself to my mind as I sought a philosophical explanation of the Noachian deluge, and several years after its conception, I published in pamphlet form (20 pages) "The Earth's Aqueous Ring," or "The Deluge and Its Cause," proving from the very nature of the flood-narrative that all the world-deluges the earth ever saw must have come from In this same volume it was the earth's Annular system. specifically claimed that the entire ocean came as annular installments from supra aerial vapors via the polar regions, which vapors were the source and cause of all the Glacial Epochs the earth ever had and were laden with mineral and metallic matter. This book was published in the year 1874 and I have copies left as witnesses of the fact.

In the present effort I will try first to convince my readers that the earth once had an annular system. This I will have to do by following a line of strictly philosophic inquiry into the various stages of world-growth as affirmed by the past and present conditions of the globe. Then I will attempt to show what elements composed the earth rings; and that gold was necessarily one of those elements. Finally I will present the proofs that in the inevitable and progressive collapse of these rings



the polar regions of a planet must receive by far the greatest part of the matter composing them, and that because gold was no insignificant part of those rings, the polar lands must be the richest gold regions of the earth.

The present physical conditions of the earth, as I understand them, are not accidental in any sense. lily and the rose have a beginning and a subsequent career responsible to conditions inexorable and despotic, so a world starts on its eternal round under the ministration of law, and the most subtle variations in the results of the primal impress of potencies can be but responses linked in everlasting union. This being the case, in order to follow up the grand progression of conditions in world evolution, as planned by the Infinite Mind, it is preeminently essential that we should know what the primal conditions of the earth were. Then knowing these conditions and knowing the law regulating them, we can at least hope to erect a theory that will not fall—a glory that cannot die. Until we can plant our feet on this rock we must admit that we are floating at sea.

In this age of tirelees research we have come to know very positively what some of the primal conditions of the earth were. The one all potent condition—the condition from which utter necessity has passed a grand array of overflowing and over-towering consequences down to our day is what is known among all intelligent men as the

MOLTEN STATE OF THE PRIMITIVE EARTH.

At this our starting point let us be sure that we are right and I ask the reader to see that the writer does not slip from this rock. It is well known by geologists whose eagle eyes have pierced the earth to its granite sills, that its oldest sedimentary beds now rest on what was once an igneous mass. The sedimentary formations are of great thickness, estimated variously at from ten to forty

miles, or even more, and such is the testimony of the lowermost beds that I suppose the geological world, with no important exception, stands solidly in support of the proposition that the earth was once an igneous liquid mass.

But we can bring other witnesses to testify in this It must be conceded that all worlds in all essentials This is what countless millions of stars are made alike. and suns affirm. Every sphere that scintillates in the empyrean must be a molten globe. The spectroscope affirms the proposition and tells us across the mighty void of space that all worlds begin their career alike—swaddled in garments of flame as our sun is swaddled now; rocked in its cradle of fire inveterate, as every other sun is rocked Thus our earth was once a glittering star, so surely as law is law. But the chief witness we have close at hand, whose testimony nothing can impeach, is the great ocean of water that rolls around the earth. know that every drop of it was formed in fire. plunge a cold steel rod for an instant in the hottest furnace, I find it covered with little globules of water, and thus we learn that water is being formed in the most fervent fires. That is what every fire on earth is doing Every furnace and volcano is pouring its tribute of water into the air.

I stand on the ocean's shore. The truest, strongest and most daring and dauntless witness of earth testifies before me. If every drop of these mighty waters was born in flame, what was the immeasurable and titanic might of the earth's primal furnace from which these waters came? Now the chemist wants no other proof than the deposition of oceans that the world was once a molten sphere. Then as oceans affirm an igneous or sun state of worlds, so a sun state or molten condition of worlds, on the other hand, affirms the birth of oceans. The man of sense then looks out upon God's empire of

inveterate fires and knows what is going on all over the universe. He knows that oceans are being born and sent to the skies from every flaming star and sun. Then he concludes that this is not all that these world-furnaces are doing, for the spectroscope at his side affirms that, associated with ocean vapors, mineral and metallic vapors ride on steeds of flame.

I turn back to earth in its childhood and knowing an ocean rolls around it today and knowing, too, that its primal history is fire-impressed upon its bosom, I see it with every drop of these waters soaring as a vapor canopy on high—winged in perpetual flight about a hot and seething globe. I look down the ages and see these vapors have fallen back to mother earth. I see the earth abloom—a scene of activity and life, and the chemist tells me that every leaf and blade that flutters in the breeze, every tree that towers above, every animal that lives, does so because in an age gone by the molten earth gave birth to interchanging and undying energies. The very mountains rise and look down upon the plain because the earth was once a star.

I take up a glass of ocean water and subject it to a strict and honest analysis. I find in it a trace of gold but enough of it to show that vast millions of it are locked up in the oceanic waters. How did it get there? plainly it was associated with the steaming vapors as they arose from the molten earth. In predicating then, that present world-energies and present world-conditions are but the echoes awakened in the fires of the molten earth, one also predicates that the distribution of the gold and other metals and minerals now found on and in the earth crust is a direct resultant of that former state of the earth. In other words if the earth had never been an igneous spere, the iron, lead, copper, silver and gold now found in the North-world would not be there. If the earth's

primal fires had not been kindled the oceans had not been made; rivers would not flow; clouds would not form; rains would not fall; plants would not grow; man, as he is, would not have been, and earth would be a mighty desolation. Without a molten age there could not have been a Cambrian age. The Silurian, Devonion and Carboniferous ages whose aqueous formations incase the world with all their wondrous hoard of wealth, would not, could not have been as we see them today.

Water is a fire-formed compound, and without the fire-born oceans what would our world be like? Air is a fire-made product of the molten earth and what would this planet be without air? Fuel is a fire-made product of the molten age and without it earth would be a dead waste. When we look from the physical to the metaphysical world it does not take the thinker long to see that our thinking and our thoughts are linked to the energies as caused by an igneous activity in an age gone by. It seems as though the Infinite Mind has so interwoven all things in the macro-cosmos with primitive igneous energies that the philosopher is forced to look back into the great world-furnace of archaean times to find the true solution of the great problem of Earth and Man.

The problem of a molten earth as thus seen comprehends a great many others. No argument is needed to prove that when the earth's watery vapors went to the skies, all else that a melted earth could send aloft went with those waters. I want the reader to see that I do not state this proposition amiss. Many years ago I gave a lecture in the great lead mining region of Joplin, Mo. I saw the great columns of smoke rising from a hundred furnaces and told my audience that there was enough lead vapor lost in cloudland to pay all the expenses of the great lead plants, and added, there is a fortune awaiting the man who will invent some means to gather those es-

caping vapors and distil them. Today each of those furnaces is furnished with an appliance by means of which the lead vapors are condensed and saved, and the lead thus secured is one of the chief sources in the manufacture of white lead which yields great income to the mine owners. I have been told that the lead thus saved is almost sufficient to pay all mining and reducing expenses. I have also been told that the inventor of this appliance was once a pupil of mine.

Now the conclusion drawn from this is inevitable. These puny artificial fires for reducing lead ores were able to vaporize and send a large quantity of lead to the skies. But every pound of that lead was once in the molten earth—in the very midst of a furnace a thouand times more competent to send it aloft. There is then no avoiding the conclusion that lead vapors went up with the watery vapors formed in the same world furnace. They floated together on high and when those watery vapors came back to the earth the lead came with them.

Other witnesses equally emphatic speak from our mints, in fact from every mint of the earth where gold, silver and copper are reduced for coining. In these mints it is found necessary to use the greatest precaution to avoid the loss of gold vapors. They rise in the flues and pipes, condense and fall as dust on the roof and floors of every apartment connected with them, and thousands of dollars of gold dust are saved every year by cleaning up the pipes etc. Gold vapor is ever present in the reducing apartments and the very clothing of the workmen about the furnace becomes laden with it and is burnt and made to give up its gold. This too be it understood is all caused by the puny fires of man. If gold is so readily vaporized how did the world's great hoard of wealth act when the mighty fires of the world's alembic gathered it from the earth's inmost depths? Plainly every atom of

it that heat could gather from the earth's bosom was vaporized and carried aloft and made to mingle with the watery skies. Gold is so readily volatilized that a sphere which contained it could not be molten and not load the surrounding air with it. It is vaporized in heat that would not melt iron or steel. A gold nugget will vanish as vapor at a temperature of 2100° but pure iron or steel cannot be fused at such a heat. It will begin to flow at 2900°. Now we know that iron not only is molten in our sun but that vast oceans of it are there in a va-It is idle then to conclude otherwise than por state. that every sun and star the eye can see, is hot enough to send its gold to the skies, if it has any of it: But we need not speculate here. Every world certainly has gold if analogy has any force in arguments. But in this discussion I care not whether other molten worlds have gold or not. I know the molten earth had a vast amount of it and all men know too that it was volatilized and sent to the skies.

The same course of igneous action, without the shadow of a doubt, forced every metal and mineral that the earth's heat could vaporize, into the flaming skies. Thus the primitive or molten earth was simply enveloped by an atmosphere of mineral and metallic vapors. us bear in mind that all the primeval waters of the globe were in that hot and flaming atmosphere. There is no guess work here. This is plainly Nature's plan of worldmaking. See now the wisdom of the Infinite in all this. How could man get a pound of iron, gold, silver or any other metal if the power that watched the childhood of the earth had not gathered these metals from its bosom by inveterate heat and lifted them into the heavens and held them there till the molten planet grew cold and then received them back again, planting them in and on the outer crust where man can secure them.

These metals have returned to the earth; the primeval waters have also come back. They went to the skies together for they arose from the same furnace, they floated in the same primeval air, in fact they all together made the atmosphere and what an atmosphere it must have been! From that atmosphere many thousand miles in depth, the superficial beds were largely deposited but here I must refer the reader to my Earth's Annular System.

Now, have I stated anything but demonstrable facts? Surely we cannot push the molten earth aside in this argument, for if we did, witnesses would crowd in from the very stars and condemn us. With a molten earth we have an ocean-maker and a metal extractor and sublimer. With a molten earth we have a primitive atmosphere that was laden with gold, silver, iron, lead and every other metal that immeasurable heat could carry aloft from a boiling and raging sphere. That molten earth grew cold. That watery ocean fell. The metal vapors condensed long before the watery vapors did, but they also fell and they must be found on the earth's crust and within it.

The reader should bear in mind that this whole process was under the beck of law. Law regulated the rise and fall of vapors then, just as it regulates their rise and fall today. Then, however, the vapors arose from the earth's own heat. Now they rise and condense under the influence of solar heat. But heating and cooling processes operated then as now. It was the age when the condensation and formation of mineral and metallic clouds took place. But in the fall of these primitive vapors we should bear in mind that they had been driven to a great height. It has been calculated that the molten earth had an atmosphere over 200,000 miles in depth. Now this great atmosphere rotated with the earth as a part of it, say once in 24 hours. Some physicists say it must

have rotated in half that time. But that is rapidly enough for my purpose.

At that rate of rotation the condensing vapors on the bounds of the primitive atmosphere 200,000 miles deep, were whirled through space at the rate of 50,000 miles But it is well known that everything that per hour. moves around the earth at the rate of more than 17,000 miles an hour cannot fall to its surface. If that great atmosphere had been but 100,000 miles deep the outer vapors had moved 25,000 miles an hour as a revolving mass and could not fall. This was the condition of things for All that time the rotating mass exerted unknown ages. a tremendous centrifugal force at the equator but no force whatever at the poles. Anyone can see that all the vapors on the bounds of the atmosphere, in fact all the matter in the primitive atmosphere, during the igneous era, above a certain height, went toward the equator, for the simple reason that the greatest impelling energy operated to carry it thither.

I certainly have not made my claims too strong. As a great revolving mass, hot and seething to its inmost depths, forever driving metallic and aqueous vapors as far as it could into space, there is no avoiding the conclusion that such vapors were carried originally from the poles to the equatorial skies. Now I cannot in this small volume take up space enough to show how all this matter gathering at the equator during the igneous period, formed into rings. I must refer the reader to my Earth's Annular System where it is made very plain.

The process of world-making then, as I see it, thus far is very simple. A molten earth, a great mineral, metallic and aqueous atmosphere involving it. Finally, those atmospheric materials were carried out still farther and into the equatorial regions. There they condense and from utter necessity form into rings. But while this is going,

the earth is gradually cooling and in course of time heat ceases to repel terrestrial matter, and then comes the turning point in world processes. Vapors that were held aloft simply by heat in the lower atmosphere, began to lose their support and return to the earth's surface. Law, however, still held the sway. As these lower vapors, now condensing, fell, where did they fall? So long as the earth rotates, it lifts as it were, all falling matter that floats near the equator and in a certain measure prevents its fall there, but does not so prevent it from falling at the poles. So that during that long period of time when the earth was cooling and permitting the *lower vapors* to descend, they must have floated slowly and constantly to the poles, North and South, and there they must have fallen.

Following thus a line of philosophic sequences from the first, we are forced to admit that during the ages of igneous activity, vapors were lifted and forced toward the equator but that during the decadence of igneous action and gradual cooling, all returning matter moved toward the poles to fall. How can we escape this conclusion?

But here we must note other regulating conditions. The primitive atmosphere was very heavy. Laden with a vast amount of minerals and metals of the earth's crust as admitted by eminent men, that atmosphere was capable of supporting mineral and metallic clouds at a vastly greater height than the atmosphere of today is capable of supporting aqueous clouds, It has been calculated that the barometric column of mercury equivalent to the primeval atmosphere was about 22,000 inches high or more than a third of a mile. Instead of an atmosphere pressing on the earth 15 pounds to the square inch it was an atmosphere that pressed more than 10,000 pounds to the square inch. So says the physicist, but to be on the safe side I will reduce it to one tenth of this, nay, I will reduce it to one hundreth and yet we have an atmosphere

dense enough to float clouds of golden dust higher than the loftiest clouds of today.

Then too we must note that watery vapor was the universal vehicle that aided to support the metallic dust of the primitive atmosphere. Watery vapors formed around each golden grain as a neucleus just as it forms about a grain of dust today. So that we may look back to a time when the vast oceans floated as clouds of aqueous vapors in which the gold of a world was locked, and we must follow those vapors back to the earth from which they came.

But let us remember that the great mass of these vapors long before the decline began had been driven into the equatorial skies. Let us remember that as these uppermost vapors rotated with a velocity of more than 17.000 miles an hour they could not fall even after the earth cooled, while the lowermost vapors rotating less than 17,000 miles an hour could fall and did fall. as we have seen, such vapors as did condense and fall, fell more largely in those regions where there was less centrifugal force exerted and fell least where the centrifugal force was greatest. It is plain that from the premise of a molten earth all vaporized matter, aqueous, mineral and metallic, that fell back to the earth immediately, as it cooled, fell from the equator toward the poles, and all of it that has not been carried, since it fell, toward the equator, lies still in those mighty storehouses of the earth, North and South. Gold, silver, copper, lead, zinc, nickle and every other metal that existed in the lower primeval atmosphere lie there in their mother lodes and from these lodes the rest of the earth has been supplied, and other lodes formed—other gold regions formed.

Here are a few quotation from *The Earth's Annular System:* (Page 65.) "Now all the fusible and vaporizable minerals in the earth's crust must have existed to the

same extent in the upper vapors just as all the minerals and metals in the Sun must be represented in the heated vapors around it. Every other hot and burning world must exhibit the same thing. * * A certain degree of heat in the burning earth kept the aqueous vapors suspended on high. A greater degree of heat sent up, in their order of fusibility, the minerals and metals of the earth, as they bubbled up as from a boiling crucible. * * The earliest sedimentary rocks must, if our theory be true, contain the heaviest minerals and metals of the crust, and also of the purest form. * * (Page 68). "This iron and this copper and silver and gold, were distilled in the fiery furnace of the primitive earth and sent up amid the aqueous vapors on high. What else could have planted them in strata of aqueous beds? What else could have made metallic beds on the outside of the (Page 79.) "In the northern hemisphere the earth." archaean beds are heaviest toward the North. Now if they were thickest and heaviest near the equator the Annular Theory would fail to explain it. But a moment's reflection must show that it does explain its northern development as no other theory can." (1885.)

Following strictly a line of philosophic argument it must be seen that for a vast period of time after the earth became cold and rigid, and the lower vapors had descended, a vast ocean of aqueous, mineral and metallic exhalation remained on high and continued to revolve around the earth, and in the equatorial skies. As these outer vapors condensed and continued to revolve independently around the earth they occupied less and less space and hence ring formations began. The outer rim of vapors could not unite with the inner vapors in mass, for the reason that the former moved much more rapidly than the latter. The rim of this wheel moved faster than its hub and the two parts must have separ-

ated as the mass condensed and contracted. Thus we must have had at least two rings, an inner and an outer one. But a further examination shows that as the mass contracted many rings were formed. That universal element—water, was one of the many that composed those rings. As a universal solvent, it contained gold, and contained it most abundantly in the superheated state; in that superheated state it rolled for ages in the skies, and as a vehicle it bore its load of gold back to the earth.

It is not necessary for me to enter into the consideration of how these rings broke loose from their ancient moorings and fell. We know they have fallen, and we know, too, that the earth contains what they contained. If they contained gold, the earth's crust has it now. If they contained aqueous vapor, the ocean has it now. During the past few years I have shown in the pages of the Annular World the most positive proof that primitive and prehistoric man saw at least two vapor canopies or vapor heavens and worshipped them as gods. also shown in that journal that a ring as it declines must become a canopy as it falls from the equator to the poles. Such canopies as now hide the true surfaces of Saturn and Jupiter are my witnesses here. Jupiter's canopy has been seen to drop a part of itself at one of his poles. nesses of this kind force me to the conclusion, that as we have the most abundant legendary evidence of the ravages of an overwhelming deluge, and of the opening and falling of heavens, and as all such heavens must have been canopies or vapor heavens, I am forced to admit that man has seen some of the last remnants of the annular system of the earth.

Let us look a little into this legendary testimony, for it is plain that if man saw the remnants of these primal vapors, then annular matter and canopy vapors continued to fall all through geological ages and closed the great drama of world making in very recent times.

The most ancient account which comes down from Latin sources distinctly affirms that their oldest god was *Coelum* or Heaven, and that this deity after ruling for a long time was dethroned and banished. Now all legends must flow from some basic truths and the inference drawn from this, is that the ancient Latins worshipped the heavens as a deity, and as that heaven passed away, it was a vapor heaven, in fact a canopy of vapors, and if so, it must have come from the earth's annular system, as primitive vapors on their way to the poles.

The old Pelasgian Greeks have sent down to our time a legend almost identical with that of the Latins. It tells us that the primeval deity was *Ouranos* (Heaven) and that after he held the celestial throne for a long time he was driven from his throne by Kronos, the god of time. In other words, we are told that the original heavens was an *ephemeral* one, and therefore a vapor canopy on its way from the earth's annular system to the poles.

The ancient Hindus worshipped the god Varuna. Now, Sanscrit scholars tell us that Varuna and the Greek Ouranos came from one and the same root, which signifies a water heaven, the root Var meaning water. Now, this Hindu deity also passed away and gave his throne over to such deities as Kala—time, Agni—solar fire, and other celestial characters. In other words, Varuna was an ephemeral heaven—a vapor canopy, and the earth's ring system comes plainly into view.

The ancient Egyptians worshipped a god called Canopus. He was a water-god and the water-jar was his
hieroglyph. The name is plainly the original for our
word canopy, and this deity was vanquished in a contest
between solar fire and water spirits, and it is impossible
not to see canopy progression here,—the banishment of
ephemeral or water heavens.

The old Chinese legends present similar thought, but I find in old Japanese thought the most overwhelming testimony yet. Their legends state that in very ancient times the heavens were very close to the earth, and that in a great contest between the solar fires and the water spirits "the old heaven passed utterly away," and moreover, as this old heaven passed away it is said a new sun came into power.

The Scandinavians have a legend of a conflict of a sealed heaven which once upon a time opened and let in the solar legions which upon marching over heaven's bridge, broke it down. The ancient Parsiis speak of "Heaven's Floating Bridge" and their Sun Mithras was a concealed god. The Egyptians also worshipped Amen, a name for heaven, but the meaning of the word is "hidden" and we plainly have the concealing canopy or the hidden heavens. They also worshipped Amen Ra, the "concealed sun."

These ancient memorials present to us the most overwhelming testimony that infant man saw and worshipped a vapor canopy which passed away and permitted a hidden sky and a hidden sun to come into view. legends are but a drop in the bucket. Before me is a pile of Mss. of over 400 foolscap pages and I see it labelled "The Gods Unveiled." It presents the world's evidence that infant man saw this world overcanopied by a vapor heaven on its march to the poles. I do not then have to rely on astronomic and geologic evidence that the earth once had an Annular System. Man saw its last He worshipped that canopy as a god, as a god it was banished and a new sun and sky came into view as it passed away.

I conceive that no objection can be urged against my claim that even our bibles teach us this great truth. all other ancient peoples saw a water heaven come and go—a vapor canopy reign and fall, it would be strange indeed if the Mosaic cosmogony did not reveal the same thing. When, then, I read in the first chapter of Genesis that "God called the firmament (Shamayim) heaven," I say that the scribe who wrote that sentence or entertained that thought, supposed that the Hebrew heaven was a water heaven, for shamayim means "there waters" (sham=there, and mayim=waters). In other words, the ancient Hebrew held the same belief that all other races did—that the skies were a watery expanse—a canopy of Then again I read in this connection that the "spirit of God moved on the face of the waters." mankind—Hebrews and all others—always held that God and the gods lived and moved on high. Then those "waters" were on high also, and the canopy is plainly alluded to. Again it is said "God made a firmament in the midst of the waters." That is the firmament which "God called heaven" was in the midst of celestial waters. Again, God "divided the waters which were under the firmament (heaven) from the waters which were above the firmament."

Now I care not how men regard these ancient writings, one thing is positively certain, at the time these thoughts were entertained, humanity knew or thought they knew that there were waters on high. If there were waters above the firmament, then those waters were a revolving canopy, for they could not remain there for a moment unless they were a revolving mass. In other words, the Hebrew writings positively affirm that a vapor canopy arched the skies of primitive man. But a canopy could not exist without making a greenhouse world, an Eden earth. Then why are we so doubting

1

when our bibles tell us that the infant race lived in an Eden clime? If man went naked in Eden, earth was covered by a vapor roof, just as the planet Jupiter is now. In such a greenhouse world it could not rain, as the sun must shine on the earth's surface to cause a mingling of currents, and without currents it cannot rain, and my bible tells me there was a day when the "Lord God had not caused it to rain on the earth." This is the same thought I find among other races, and it does not fail to substantiate the claim I have made that the early races Now if there ever was saw a great vapor roof on high. a time when it did not rain on the earth, then the sun did not shine on the earth's surface. The sky and sun were concealed. No stars could be seen at such a time except in the polar skies, from which the vapors fell.

Why was it ever conceived by man that these conditions once obtained? Simply because they did obtain, and the idea is fossilized in world thought. A concealed heaven and a concealed sun are world-wide conceptions. The whole conception of man in Eden, his connection with the Tree of Life and the Tree of Knowledge are based on the one rock of inexorable law,* and that law is the one that has presided, as the earth's crust was built to a large extent by the wreck of canopies. A concealed heavens and sun are seen all through the vast realm of Mythology, and the thought forces us to admit the reign and fall of canopies, for the thought is fixed in the grand arcanum of humanity's cradle time.

As I turn away from this wonderful scene, I recall the "Golden Age" of Hesiod and antediluvian man. What ever gave rise to the thought that man once lived free from toil? What originated the idea that man once lived to eight or nine hundred years? The immortal

^{*}I must here refer the reader to my "Eden's Flaming Sword," wherein I have connected these world scenes with a world canopy, and have explained this whole tragedy of Eden. See last of this volume.

thought must have originated in actual facts of some kind. When I look back into an Eden world, such as must have existed every time a ring descended and a canopy overarched the earth, I see life prolonged as a necessary result of solar exclusion. Sun exclusion means a cessation of vital activities. Life in a greenhouse world was life where solar activities and chemism were held in check. The sunbeam, as we have it today, is a ripening agent. As the living plant is hastened to its destined end under solar power through the mysterious touch of a vivifying and vitalizing energy, so the *living being* ripens and matures and is gathered under the inexorable sway of the sunbeam. The solar ray has a destroying power and a building power.

Plainly the building power of the sunbeam is placed in the ascendency in a greenhouse world. A vapor canopy, then, was favorable to long life every time it over-One glance at the tertiary dead vaulted the earth. shows a world covered with animal forms such as could not obtain at this day in a natural state. Long life in a tropic world, made such by a canopy which sifted out the maturing and death-dealing power of the sunbeam seems to have characterized several of the geologic ages. But the dead, the mighty and abounding dead! What a tale they tell for all time! A world of life brought to a close, by what means? A canopy competent to make a world of exuberant life, was equally competent to crush out that life in its polar downfall. I cannot see a world of life destroyed by any other possible cause than the fall of canopies. The march of deadly winter tells the tale. There is Alaska's mighty dead. There is the reign of eternal winter on the ruins of tropic life. Tell me the cause. It is idle for man to look further than canopy evolution for the all adequate cause of the earth's stages of modern geologic times.

All these things speak of Edenic life, followed by snow and flood. I need not be told that man lived in an Eden world, nor that he was naked, for it was warm. But a change came on. He was now clothed in the skins of animals. In other words, a canopy was falling at the poles as snow, and a chill was creeping over the earth. Let us remember that snows only can make a warm world cold. Here, too, we must admit that if canopy snows were falling then, the canopy was growing thinner at the equator, and Eden made by a canopy must disappear. Then we hear that man was deprived of his Eden home. But tell us why was a warm earth chilled at the very time man's Eden was taken from him? it was another of earth's great revulsions by which the planet and all things thereon were lifted higher. immortal records I have quoted tell a tale that all intelligent men will admit to be true. But strange that men must find it verified first in the nugget land of the frozen north.

But there is another chapter yet untold. What does the great longevity of man in antediluvian time mean? If it means anything at all, it holds up to our gaze another canopy, some 2000 years after man lost his Eden In other words Genesis has recorded the fact that one vapor heaven had passed away. The very thing that almost every race and tongue has memorialized in song and legend. What does it mean? It means the march and fall of canopies, while man looked on as a helpless victim of the world change. But what does the new canopy mean? for man lives 800 years. It means still another canopy fall. It means the march of snow and It means a golden age crushed, perhaps forever, by snows in polar lands and floods in medial latitudes. Have we ever heard of a flood in which humanity realized once again that they were the victims of inexorable

fate? We are told there was a flood. The memorials of that mighty debacle have come down to us in such a way that no man of intelligence will now dispute the fact. What caused that flood? They tell us the heavens were opened then. If this be true, then they were closed before, and the concealed heaven and sun of other races bounds into view. In other words, a canopy rolls away, the sun begins his rule, and man's great longevity must decline, and here we learn that immediately after the flood man's age is reduced and in a few generations he dies at three score and ten.

Now there are some master links in this chain of evidence to prove that a canopy rolled away. It is said in plain terms that the *rainbow* came then into view, with the understanding that man had not seen it before. If this be true, the question of canopy evolution is settled here, and settled forever, as anyone can see. A rainbow could only come as the vapor heavens passed away. Then again the flood narrative states that the God of nature affirmed that that was the last flood from heaven. Now why did such an announcement go forth? It went forth because it was a *proclamation of the skies*. All men saw the heavens stripped. The last ring had descended. The source of all celestial floods was "broken up."

Then again the narrative states that the law was made a sign that there would be no more floods from on high, which means nothing if it does not mean that all flood canopies are ended. So long as no canopies spread, the bow may be seen and becomes a sign of security. Man saw the wondrous transition. He saw the heavens cleared, and he knew the bow meant the end of exotic floods. The very heavens proclaimed the fact, and therefore it was the voice of God.

Thus the Hebrew people have preserved undying memorials of the reign and fall of vapor canopies, just as other peoples have done. They saw two canopies come and go. Go where we will, back into the nighttime of antiquity, and we see this grand drama of evolving skies. The libraries of old Nineveh and Babylon tell it in terms too plain to be long misunderstood. I have given but a tithe of the available testimony on this point found in old-world thought, but I have given enough to show that man has seen canopies fall, and this is all the evidence I want to prove that this earth once had an Annular System. Now the consequences of the progressive collapse of that system are recorded all along the ages.

The Geologic Record is simply the record of marching vapor canopies ending their career at the poles. It is idle to study that record without this fact in view. My readers can see what all this testimony means, without much more on my part. It means that the fire-formed oceans came back to the earth via the poles, all along the ages. It means that countless millions of wealth fell as the waters fell, and that more largely in polar lands; and from the very nature of things, that wealth to a vast extent yet lies locked in and beneath this frozen crust of polar lands.

Let us now reflect that this legendary evidence cannot be thrown out of court. It must have weight with the world's intelligent jury, for, as the investigator and sifter of traditions goes back into the darkness of antiquity, he sees more plainly the meaning of these fossils of thought-strata. Men may call these traditions the twaddle of the infant race, but that cannot crush nor impeach their evidence. They affirm and will affirm till an incredulous world is forced to admit that man saw the last remnants of the Earth's Ring System. This I say will be the last and irrevocable verdict of the court now sitting on this case. The result of this verdict must be the overthrow of long-established opinions in almost every field of

thought, but the old-school geology will be one of its more hapless victims. For if man saw the last falling remnants of an annular system, the race lived for unknown centuries under a Jupiter-like canopy, and such canopies are all-competent to make all the warmer ages the world ever saw, and their name is legion. If they made the warm ages, their polar fall made all the "Ice Ages." If they made these they were the most competent world wreckers and strata formers of the whole geologic past.

I look back on the confines of Azoic time, then, and see some adequate cause for the close of the Cambrian I see an ocean has so changed its waters as to nurse the rudimental forms of life. That oceanic change speaks of a vast addition of water, and thus a polar downfall comes to view away back in the midnight past. is not all. Even there we see the wreck of continents, which an ice age is most competent to affect, and a polar downfall is again affirmed. From that time forward we see a constant progression of ages, and vainly we look for an adequate cause if we stop the testimony of rings. The oceans change again and again, and every change means additions, and additions mean polar snows and climatic change and the glaciers' march. We see, too, the climatic changes and the ice-god's track. Not once, nor twice, but all through the ages. I ask the reader to find, if possible, a cause for this march of ages, if we are to put the earth's rolling canopies aside. Is there anything now existing to augment our oceans, crush out life-forms, and send glaciers and floods over the earth? No! not while the rainbow shines, for the source of such things has been "broken up."

As I see it, this age will go on till the end of time, but other ages did not. The simple fact that age has succeeded age is all the evidence we need to prove that the reign and fall of canopies has brought the earth to its present state. Thus I am led to predicate that the fall of the first or innermost ring of the earth's annular system closed the Cambrian age, the fall of the next ring closed the next age; the fall of the third closed the third, and so on down to the age of man, who has seen at least two great vapor canopies come and go. The deluge closed the golden age of man. But here I want to be understood. Though the deluge was the last downfall of waters that could come from on high, it was still more than two thousand years before the last of the vapors fell from the polar skies, of which I have the strongest legendary proof. I must therefore press this idea of modern polar snowfalls a little further. There was a time within the range of human history when the climate of the north world was much milder than it is today. It is well known that one thousand years ago there were prosperous settlements and even villages in Greenland and Spitzbergen, where now eternal ice is king. The hardy seamen of northern Europe penetrated with their frail vessels where ironclads scarce dare to venture now. The mere fact that Greenland's ancient settlements are no more, speaks of climatic change, and shows that the advancing rigors of arctic lands have driven them away. Snowfalls, I am sure, are the only cause. About that time the northworld "poured forth from her frozen loins" "countless hordes of barbarous" Goths, Visigoths, Huns and Vandals, who spread over all southern Europe and even into Africa. What started these armies from the north? They were in search of more genial lands. Then back of it all is the fact of climatic change. If the north world was capable of producing "hordes of barbarians" for the invasion of more genial climes, then it was a warmer If it was warm enough to fill those world than it now is. regions to overflowing with inhabitants, we need look no farther for evidence that the north polar snows increased.

and rendered much of that land too cold for human progress.

I can see no other adequate cause for the invasion of the Roman empire by northern races. I can see no other competent cause for the abandonment of the once prosperous colonies in the far north. Certainly these would never have been planted there under conditions obtaining there today. I turn to the old annals of Greece, Rome, Scandinavians and other ancient races, and I find the most undoubted proof that all those peoples saw the northern sky clouded with canopy vapors long after the heavens opened at the equator and the sun shone in there. All which forces the conclusion that man saw vapor canopies. Hence the gold-laden vapors must be allowed to testify.

I quote myself again: "Immediately upon the decline of an equatorial ring into the lofty regions of attenuated air, it is converted into a belt and it gravitates toward the poles, the points where gravity is strongest and where the centrifugal force is zero. Hence it must follow that but a small part of the Annular System fell in the equatorial world." Now as I have claimed from the very first that gold was one of the vaporized metals of the earth, and one readily diffused as a vapor among watery vapors, it follows that my claim that it has returned and is now hoarded about the frozen poles, is no afterbirth, no ex post facto thought. 'The earth's annular system was certainly made up of aqueous, mineral and metallic vapors, as I have endeavored to show in all my writings on this theme. I could quote a hundred paragraphs from them, showing that I am not stating my claims now for the first.

Because gold, silver, iron, lead, etc., went as fiery sublimations to the skies and into the earth's ring system, they also came back along the track they went. It is now not as much a hypothesis as it is a fact, as every

I am not straining a point here, and as he knows, too, that Edenic conditions have once, if not many times, obtained in lands now locked down with eternal ice, it seems that he ought long ago to have urged Annular World Evolution to the front, where it is bound to go when men with eyes wide open come upon the stage.

I have witnesses yet to put upon the stand whose testimony will be anything but satisfactory to the old-school geologist. I refer to the

GREAT ICE AGES.

How often the icy heel of inveterate winter has crushed a world of exuberant life we need not know. is sufficient to know that again and again the ice-king has marched over a tropic earth. If we could see his deadly trail but once that would be enough, for such a trail defies explanations with the earth's ring system out of view. It might as well be stated now as later that a world cannot grow cold without the aid of snows. Worlds don't grow cold in order that snows may fall. fall and tropic scenes vanish because they fall. Had men attended to this fact, what an amount of fruitless theorizing might have been avoided. But before I go further, I must quote Vail again. This time from the "Deluge and Its Causes," 1874, page 14. "A body of exterior waters skirting the atmosphere, having its motion gradually diminished, would gradually descend toward the earth and must have spread to the poles by the mere force of gravity. Animals in the polar regions would be suddenly entombed in snow, which in after times would be converted into glacier ice; and those animals would be preserved until relieved by the retreating mass containing Well, what are the facts? Today may be found the skeletons of the hairy mammoth imbedded in 'pure, clear ice,' * * * the whole carcass preserved, their

hair, skin and eyes; their flesh becoming the food of wolves and bears; the contents of their stomachs undigested, showing that they luxuriated in coniferous forests up to the very time or day of their death. These facts give no room for speculation. Their history was written then, and from it we glean the incontestible evidence that they were suddenly overwhelmed by a downfall of snow. Cuvier said that these animals 'were frozen up immediately after death.' He might have said they perished in their graves.''

Since the beginning of the present century many carcasses of both the mammoth and the woolly rhinoceros have been found in the frozen north. The first mammoth was found in 1799 in the glacier near the mouth of the Lena river in Siberia. It was exposed by the melting away of the ice wall, and hung for a long time in the lofty escarpment, "forty feet above the earth's surface and two hundred feet below the top of the glacier." Plainly that animal was overtaken by falling snows, for, be it remembered, "pure, clean glacier ice" is only formed from The conclusion must be that very recently in geologic time the mammoth and his huge congeners roamed in vast numbers in what is now the frozen north world. We are forced to this conclusion both by these well-preserved bodies in ice and the vast quantities of their bones and teeth scattered all over the north. Then we must conclude that there was a time when all that north-land was free from the chains of winter.

The condition in which the Siberian mammoth was found, the condition in which a number of others have since been found, gives no possible escape from the conclusion that the snows that buried them was an avalanche from the Arctic skies. Putrefaction had not even begun. The tissues of the flesh, the blood vessels and the vesicles showed that death was sudden, and that too in a snow-

made grave. In one instance the very pupil of the monster's eye was preserved entire. All these conditions have been known for nearly a century, and it would seem that men could not fail to see that such a sudden burial demands a sudden down-rush of snows. Then, too, with Jupiter's canopy apparently forcing its evidence of polar falls into court, how has it ever happened that men who stand foremost in the ranks of the learned, have not long since recognized the claim that the earth's annular system was the grand agent in this mighty world catastrophe?

With this fact recognized, Alaska's gold field ceases to be a puzzle, for the same cause that was competent to glaciate a tropic world gave the placers their amazing wealth, as will be shown later. I ask how can reasonable men for a moment doubt canopy declension with all these things in view? But in the day that canopy progression is a recognized fact, the polar deposition of gold becomes recognized also, for the inveterate fires of the molten earth forbids any other conclusion. The same snows that made this vast desolation, went as vapor, gold-laden, to the telluric heavens. If, then, the mammoth and his compeers are sealed in the ice and snows of a frozen world, they testify also of the immeasurable wealth hoarded away at the beck of annular law.

The reader must now see that the claims I have made as to Alaska's gold depends upon the truth or untruth of the annular theory. If the earth once had rings and canopies, they made this northern land a storehouse of metals. Well, have we not had evidence enough that the earth once had rings in the fact that the Arctic world was the dumping ground of annular snows? On the other hand, if the earth never saw canopy processes, my claim for the annular origin of Arctic gold and other metallic wealth is void. The whole thing hinges on the claim that God made this earth according to Annular

Law, and that law is announced from every sun and star of God's empire.

Shall man wait till Jupiter drops its canopy; till Saturn's rings collapse and Mars' so-called "canals" pass from view to become convinced that the Earth is not an accident? Will the ablest teachers and scholars continue to exploit the most absurd theories to account for the Ice Ages, when every schoolboy ought to know that our oceans could never have come from their primitive home on high, except as canopies and canopy snows? great Lord Kelvin, whose name need but be mentioned to give authority to his claim, could settle the great Ice Age problem with but a hint that the snows of the glacial periods came from Jupiter-like canopies that once inclosed But instead of this, what has he done? en his efforts to convince mankind that the earth, retiring from solar heat, became inclosed in glacial snows. All this in the face of the fact that no one knows that the earth can get snows by withdrawing from the sun. Men who have ascended in balloons might give him some evidence of the temperature of interplanetary space. he might also learn something from the fact that the earth is about three millions of miles further from the sun in our summer, in the northern hemisphere, than in winter.

All such theorists overlook this one essential: The earth must have an increase of solar heat to cover itself with snow. Vaporization must come first, or snows cannot form. Snow formation is work, and there must be energy behind snow formation. The earth could no more become glaciated by decreasing solar heat than an ocean steamer could increase its speed by putting out its fires. It cannot be denied that the more snow and the more ice that are formed, the more energy in the form of heat is required. What, then, must have been the heat energy required to glaciate the earth again and again? It seems

to me that when men support the "Crollian theory" of glaciation, they subvert the very law necessary to support. But where was the heat that vaporized the waters that formed the snows that a canopy let down upon the earth? One does not have to go far to find it. It was the energy of a molten earth that supplied the snows of every ice age this world ever saw.

The idea of gathering heat from a sun, ninety-two millions of miles away, to vaporize enough of our ocean in order to cover the earth with ice! If we could get the heat we could also get the vapor, but how will we get the heat to vaporize the seas and the cold to freeze them, both at the same time? This may do for Lord Kelvin and his satellites, but the annular student will say "not any, thanks." The simple fact is, as I have said before, the earth grew frigid because the snows fell upon it. The snows did not fall upon it because the earth became frigid. The sooner men learn this great fact the sooner will they mount the high plane of Annular Law, and then there will be "clear sailing."

Men seem to have forgotten the fact that the energies of an igneous earth have not died out. And why they call upon the sun to accomplish what is plainly an impossibility, shows the grand struggle the old-school geologist is maintaining in order to exist. Now if men have failed to produce a glacial theory that will stand the test, after nearly a century of the keenest searching and calculating, is it not about time to come home and hear the great Earth tell the tale of her own exhaustless energies! Hear her announce the law of world-making. Hear her witnesses speaking from a thousand fields, all asserting that this earth once had an annular system whose gradual and progressive collapse made the earth's crust as we see it today.

The earth's unquenchable fires staked out its own

placers, laid its own iron sills, built its own mighty treasuries in and on the crust, and God, the Law Giver, saw that it was done as unfathomable wisdom originally planned. The *grand intent* is seen when we can peep in and see the plan carried out.

This theory of the glaciation of continents is not an ex post facto birth either. I quote again, the "Deluge and Its Cause," (page 19, 1874): "There was a time when a great part of the land of the earth was covered by a vast moving glacier. Its track is seen on every continent. In many places it must have been more than a mile in depth. * * Nothing but a fall of snow could have formed this mighty mass, and that snow must have fallen from space. Thus a succession of rings approaching the earth, and then expanding by the force of gravity into belts, and finally falling, would seem to account for those great cataclysms of modern geologic times."

Seeing these thoughts have been published very nearly a quarter of a century, in which time the greatest minds have grappled with this problem, it is but due to the Annular Theory that it be given a part of the world's attention, and I trust men will pardon me for using the present excitement about the great gold discovery in the north world to bring it more directly into view. Since from the very first I have claimed that not only gold and silver, but all metals that could be vaporized, were carried into the ring system and back again via the poles, and since in the same proportion, as all other theories fail to account for the ice ages, the canopy theory advances, I am content to leave it with the world's jury.

If it be true that the last great ice age was caused by an avalanche of canopy snows, it will be safe to claim that this same potent agent of world changes was an active factor away back in geologic time. From the very time the earth's fires grew tame, falling vapors began to chill those lands first. Above all others, those regions were the first prepared for life's forms. So that life of all kinds must have radiated from those lands as well as mineral wealth. Then, too, we are forced to admit that the first snowfalls were richer in metals than the later ones.

Here we want to pause and listen awhile to paleozoic testimony respecting those great snowfalls of the remote geologic past. Many eminent geologists have claimed that the evidence of glacial action extends back into the very midnight of geologic time. If it be true that the presence of boulders is evidence of glacial action, then the question of snowfalls in the early ages is readily settled, for we find boulders scattered all along the ages. Numbers of them have been found in the rocks of the Cambrian and Huronian, and when we come to the Silurian and Devonian strata, we find them in greater quantities. When we enter the Carboniferous age we find these boulders in astonishing quantities. Vast beds of them lie as conglomerate among the coal strata of the world, and boulders have occasionally been found even in the coal veins themselves. The Permian and Cretaceous beds show the same evidence. However, in the Tertiaries we have the most abundant evidence of the alternation of warm and cold ages,

The Tertiary, above all other ages, was the time of abounding animal life. It was an age when astonishing hordes of the hugest animals possessed the earth. Their remains are found on every continent—I might say in every land, and their total extinction at the end of that age, tells a tale of invererate winter and involving snow—a day when huge icebergs floated upon the oceans and rivers, and continents of ice moved over the land.

When, however, we come down to more modern geologic times and find another warm age, and see the most undoubted signs of a long and perpetual summer even up to the very poles; when we see that the world was just rescued from the ravages of a long and fatal winter, we feel like asking what melted those icy chains. At that time deluges vast beyond human conception rushed along a thousand valleys from the melting glaciers. What made those glaciers melt so rapidly and hastily yield to the advance of summer? How could a frozen world grow warm in such haste as to flood the earth? Do we hear of glacial floods now? Such floods, as I think, can never occur till a greenhouse roof is reared anew. Another ring descended and enveloped a world of snow and ice. greenhouse earth was formed in spite of the ice and snows that held the mastodon and his congeners in their wintry graves. A greenhouse roof, a world of ice! Anyone can The ice must give way, and that speedsee the result. I hold that no other world-condition in the line of material world-evolution could have forced the glaciers to so hastily release the continents and bring summer on again.

As we thus come to know the character of the worldchanges of modern geologic times, we see the canopy coming more plainly into view. But if such rushing and crowding changes in medial latitudes tell of canopies and their hothouse consequences, what are we to conclude when we know that the very poles have been the scenes of tropic life? Can human reason contrive anything more competent than a vapor canopy to melt and banish polar ice-fields?

I cannot imagine any other agent in God's universe at work to make the frigid poles regions of exuberant life, and so long as I see the omnipotent canopy thus at work on yonder "king of planets," as God's material vicegerent in the building of world-crusts, I say I am forced to fall back on this rock, and I do not believe any

earthly power can drive me from it. From this Gibraltar the annular student looks over the vast graveyard of the Tertiary and Quarternary dead, and ceases to marvel that age has succeeded age and life followed life in the very midst of the mightiest earth revulsions. He looks back to a time when a great part of the northern hemisphere was incased in vast continental glaciers. In the ordinary course of things as he sees them now, he can imagine no possible way by which the grip of implacable winter can be loosened. But figuring on canopy processes as he sees them at work in the solar system on at least three of our sister planets, he may contemplate how the energies of a molten world can even come to bear on an ice-inclosed earth and change it to an Eden, as it has again and again in ages past.

Looking back he can see a ring, by a slow but steady decline, enter the atmosphere at the earth's equator. The rotating earth and the buoyant power of the air check its downward motion in front while it pushes onward from above. As an inevitable result he sees that ring spread sidewise into the form of a belt, and slowly but surely it forms a canopy over the whole earth, because of its tendency to fall to the poles. Into that canopy he sees the solar orb pouring its immeasurable flood of heat. that vapor mass the sunbeams gather strength. that canopy, as the temperature increases as it naturally would under such a greenhouse roof, no glacier could last very long. It speedily melts, and floods rush in headlong flight to the sea. Tell me, how else could "floods immeasurable" flow from continental glaciers? And yet it is the united judgment of geologists that such floods did occur. Well, if they did, the canopy must be allowed to testify, and if the canopy takes the stand, foundations will tremble and pillars tumble.

Let Saturn and Jupiter speak and men will wonder if

it be needful to freight the past with such millions of years as is usual to account for world changes. How long would it take for a glaciated earth to shift its ice as floods to the sea under such a hot-house roof? I think it would be a mild, if not a poor canopy, that could not in less than a hundred years transfer the mightiest glacier to the ocean and transform a world of death to one of bloom. But I do not offer any figures now. I only suggest that when the geologist of the old school shall have been born anew and shall become a practical annular student, he will have little inclination to regard our beautiful earth as an old, decrepit thing.

Is there anything improbable in these claims? Are we not rather forced to these conclusions the very moment we make the molten earth our fortress? There is the tropic earth, a tropic pole. Suddenly as the dash of a hurricane it is transformed into a vast desolation. The hairy mammoth and the woolly rhinoceros tell the tale and tell it truthfully. It came as a stroke! Either this, or evidence is worthless. These huge denizens of an Eden earth luxuriated in polar pasture on the very day of their death. It did not require millions of years to bury the mammoth in his snowy grave. Though he may have had his last long sleep during the reign and fall of dynasties, and uncounted ages may have rolled away as he lay immured in walls of ice.

Thus while it may be that millions of years rolled by during an existence of tropic life, and millions of years may have passed while the earth lay covered with its icy mantle, yet the transition from a frigid condition to a tropic state or from a tropic state to an arctic one, requires but a very short time. The snow and ice of polar lands today must be largely the result of the last canopy fall. In the far north or far south it is hardly probable that snows can fall now to any great extent. Moisture-

laden air would soon drop its load when chilled by polar cold, and I assume that today polar snowfalls are largely confined to the outskirts of the frozen world. As no canopy can come now to melt the polar ice and make a warm world, it will be a long, long time before the Arctic and Antarctic lands will bloom again, if they ever do.

GOLD CARRIED FROM POLAR LANDS.

In ancient times gold-laden vapors fell more abundantly than they did in more recent geologic times. Hence ancient glaciers were more richly stocked than the modern. For this reason we find more gold in the oldest glacial beds. Hence to be an expert gold-hunter or gold-finder one must be able to distinguish the old glacial formations from the recent. This, of course, is a difficult task, and must be done on the spot and by one acquainted with glacial action.

In this age millions of huge icebergs break away from the ice-coasts of the polar regions, both north and south, and move with the water currents into more genial seas, and melting, drop the loads of minerals they contain, scattering them broadcast on the sea bottom. gone on, as we have seen, since the first ocean fell. lions of years since the earth was fit for the abode of man, the gold-laden iceberg tottered from the world's lofty icecrowns and floated toward the equator, thus carrying the products of the molten earth and planting them in the stratified supercrust within the reach of man. the icebergs that now come down from the frozen north through Davis' strait and Baffin's bay and lodge by the thousand on the coast of Newfoundland and the "banks," were laden with gold, it is plain that in course of time the sea botton of these lodging grounds would become rich with gold, which no quartz bed ever yielded.

Now there are such beds scattered all over the known earth. Let us look at this feature. To a certain extent,

what became ridges and mountain folds in azoic or archaean times, remained ridges and folds through the ages. As a matter of course, these ridges determined the direction of ancient sea currents, and hence also determined the tracks of the icebergs, their lodging ground and dumping sites. The depression in which Baffin's waters flow determine the track of the north Atlantic icebergs, and their lodging ground also. Hence the millions of boulders that rest on the sea bed of the Labrador coast are lying there today because in an age gone by that depression was made. Now on the west coast of North America is the primitive earth fold, as all geologists well At a later age this ridge was extended from the Arctic ocean through the United States, Mexico and South America. This ridge determined the course of the polar currents in the ancient ocean.

Icebergs formed from downfalls of canopy snows and laden with gold, broke from their polar moorings and floated seaward only to be urged westward against this mighty earth-wall. Those from the north floated southward and westward because the earth rotated eastward. It is easily seen, therefore, what was the ancient stranding-ground of the icebergs of the Azoic and Paleozoic seas in the northern hemisphere. In the south polar regions the bergs floated northward only to be carried westward against the infant Andes by the eastward motion of the earth, and hence we see the lodging grounds of bergs in the southern hemisphere. For this reason and this alone, then, the annular student would expect to find gold regions scattered all along the east side of this world wall. I do not say that gold cannot be found on the west of this great coast ridge. I say that as the vehicles that carried gold from polar lands must have lodged for ages uncounted and uncountable on the east side, the richest gold fields of the Pacific coast must lie on the east of this mountain

fold, and I am willing to leave the decision of the case with the world's jury.

Whether you find a gold region in British Columbia, the United States, Mexico or South America, the law of annular progression demands that it be on the eastern flanks of the coast ridge. As these icebergs have floated since the birth of oceans and continents, one would naturally conclude that a vast amount of gold must have been carried from the polar lands toward the equator. were other walls than this great primitive one in the west There were other and northwest of North America. stranding grounds for laden bergs, but the geologist knows of none like the Pacific fold. On the east of the "Rockies" there was plainly another depression in the A critical study of this leads me to conclude that this depression extended from the Ozark ridge to the present polar sea. It afforded a grand highway for these gold-laden ships of the gods. Need we wonder, then, that the environs of Pike's Peak, standing right in their path, should gather in their cargoes of gold and other metals.

In regions where mountain folds run east and west and opportunity given for ocean currents to strike against them, I would expect to find gold fields on the north side of such walls. North of the great lakes is the Laurentian Ridge, extending from the Labrador coast westward to the Pacific coast mountains, another of earth's oldest wrinkles. For immeasurable ages the polar waters dashed against this ancient shore. In places along its northern slope the ancient icebergs must have gathered as they do today on the "banks" and Labrador coast. There they lodged and dropped their wealth, and I assume there must be rich gold fields along that ancient stranding ground.

There is a great depression in the ridge where the

Red River of the North and the head waters of the Mis-Through this depression the sissippi come together. the north polar waters must have been carried, and in a vast region about this depression and northward from it, I would locate a gold field. Gold seekers need not expect to find placer gold in Canada on the southern slopes of this ridge, but there are abundant reasons for expecting to find it on the north of it. In Asia the great Altai ridge was another such barrier against polar water, and I see no reason why southern Siberia is not rich in gold placers, as also the eastern slopes of the Ural mount-Eastern Siberia, located so near to Alaskan high lands, where in all ages the glacier has formed and melted again and again, ought to be phenomenally rich in gold placers.

There is a great gold field in Southern Africa. I must bring it in here, a witness of great importance. To do this I will simply quote from Vail's Annular World, Vol. II, No. 21: "When gold was found among the aqueous deposits of South Africa, the old-school geologists, as usual, would not credit the fact until forced to. whole region of gold deposits there is an old sea bed, and the metal was borne thither from other regions. nent English geologist, when he looked over the field, declared himself 'unable to account for the anomaly.' Another one said he 'would have expected to find as much gold among the lake beds of Scotland.' All this comes because geologists fail to recognize the fact that the gold dust of the world was made in the earth's subliming fires and sent to the skies amid its fire-formed vapors.

"If men would consent to open their eyes and see the great earth's primal exhalations, gold and all other metals, to a vast amount, lifted from the earth's deepest bosom to the heavens in the age of fire, and formed into a ring system, there need be no 'anomalies.' Earth-rings were the homes of all the metals that could be lifted by dissolving fires. This planet could not be in a molten state without filling the terrestial skies with such distillations, and the law of annular decline demands that these should float toward the polar world in order to come back to the earth's surface. Law demands that these vapor bodies, laden with their fire-formed riches, should linger on the bounds of the atmosphere and return through the ages.

"With this plan of gold deposition, we look back into Permean time and see a great vapor-laden canopy with its golden wealth, hanging like a molten heaven over the earth. See it part at the equator. One-half of it rides slowly toward the north world, the other gravitates slowly toward the south world. There, in the course of centuries, it falls amid the snow piles of the Antarctic continent. As time rolls on this continent of snows becomes a continent of ice, piled mountain high. But let us remember that it is ice laden with the metallic dust of the molten earth. At that time South Africa was a part of the ocean's bed. The ice fields of the south moved from the continent to the sea, and by ocean currents were carried toward the equator. We see, in imagination, thousands of great southern icebergs borne to this spot of ancient Africa, as in an eddying sea, just as we see them today off the 'banks' at Newfoundland. There, in warm waters, they melted and dropped their load.

"Thus the gold, once native in the infant planet, raised by immeasurable heat from the lowest depths and lodged in the celestial waters, found a temporary resting place amid southern snows, and thence borne by ice, found a final home in the sea-forming beds of South Africa."

I presume that every intelligent man acquainted with the gold deposits of South Africa knows that it must have been carried in the sea to its lodging place. But what carried it, and whence came it? I must urge that the iceberg was the vehicle, and the south-land the region from which it came. One thing must be admitted, that the gold in this old sea bed in South Africa was not ground out of quartz beds, for there are no such beds there from which it could have been derived. gold discoveries are made, the intelligent miner turns away and disregards old ideas. The idea that gold came originally only from quartz rock in the neighborhood of the placers, must be glven up. The Cripple Creek gold, the gold rock of Southern California, and the Alaskan gold, all prove that it is found in various kinds of rock. Full many a gold seeker has spent his life and his wealth to find a gold-bearing rock simply because he saw signs of placer gold near by. Gold-bearing rock may have yielded placer gold, but many a miner has found gold rock and yet no gold placers near by.

Since the placers may have been water deposits, carried by sea currents, or morainic drift carried by glaciers, the wise miner will not spend a fortune to find a gold lode on the hillside because he has found gold sands below. He will learn the evidences of glacier action. He will study topography and above all, he will study the Annular Theory and learn of the world processes that have made the earth as it is. I quote again (Annular World, Vol. II, No. 24):

"A little more experience in gold mining will lead the thinker clear away from the old-school idea that all gold is derived from primitive rock. The evidence is cumulative that very little placer gold was ever contained in rock beds. Very recently Peter L. Trout, an intelligent miner, who has had large experience in various gold-yielding lands, spent several months in Alaska and has given some cold and stubborn facts regarding the gold in

Pag.

that region. There in the very region (under the Arctic circle) where gold must have reached the earth from its home in the skies, it should be found in almost every kind of rock. But above all, it should be found there in abundance in the form of grains and dust as it fell from the skies, amid the glacial snows that fell there from the earth rings. It should be found there incorporated with the very glaciers that have held some parts of that land in their icy grasp for thousands of years.

"Peter L. Trout found gold dust and ruby sand on the surface of the glacier that environs Mount Fairweather, at a height so far above any gold-bearing rock in that region as to forbid its having been derived from it. Now tell us, brothers of the old school, where that gold and ruby sand came from?"

Here is a gold-bearing glacier. If that glacier, like the great Greenland glaciers, could move into the sea and give birth to icebergs, these would float thousands of miles, perhaps, before in melting, they would drop their golden sands.

"If Mount Fairweather glacier is gold-bearing, why may not other Arctic and Polar glaciers contain gold? If that glacier did not get its gold from gold-bearing rocks which it had crushed into sand, it certainly did get it from the earth's annular system—from canopy snows. Then I say it may be a fact that some of the glaciers of the polar north are gold-bearing, for they may be some of the very ancient remains of snows that fell away back in the ages. Again, it is very possible that those exotic snows, that fell in recent geologic times, may have carried gold from the skies, and if so, the icebergs that now float from the north world and melt in the deep, may yet be distributing their golden hoards over the earth.

Here is what Peter L. Trout says about the origin of the gold on Mount Fairweather glacier: "This gold certainly never came from quartz veins, as it was found in meteoric dust, and heaven is the only place I can think of that it could come from, or the ethereal blue vault above us, or wherever meteoric dust comes from." Heaven certainly was once its home—not the meteor's heaven, but the telluric heaven; the heaven whither inveterate fires sent it in ages gone by, and where it floated for millions of years in revolving rings, belts and canopies, and whence it fell in the fullness of its time.

When I think of the vast ice cap of the south world and recall the fact that it does not require such vast ages to produce them, nor such to banish them, I am not slow to suggest that that mighty glacier now covering the Antarctic continent may be composed largely of gold-laden snow. Certain it is, that icebergs have floated for millions of years from that frozen land, and certain it is that land has been capped again and again by gold-laden snows. But let us now turn to the

ALASKAN PLACERS.

I have said that placer gold can be no reliable sign of gold veins in the hills above. I have shown how icebergs melting drop their burden to the bottom of the sea. If in primitive times quartz beds were being formed in highly silicious waters and falling gold could fall and sink and mix with the forming bed at the bottom of the sea, then gold veins would be formed in a matrix of quartz. But if any other kind of a bed was forming then, it would be gold in another kind of a matrix. Now as the north world, during all the ages, must have been a dumping ground for mineral matter from on high, I cannot conceive that quartz beds carrying gold can be a characteristic of polar lands, but that gold veins will likely be found in almost any kind of rock, and instead of gold running in veins only, I would rather expect to find this metal all through the rock mass.

Now Alaska is a grand upheaval. The gold-bearing rocks of ages past are cast up to the wear of storm and frost and the grinding of glaciers. The upturned beds were formed of the minerals and metals falling there in ages past, and are necessarily rich in mineral wealth. Ages of frost and glacier action have been reducing these At the same time, the gold in the glaciers rocks to dust. has mixed with that which past ages stored in the earth's This process has gone on from very early geologic times. From the very nature of this northern upthrust, it is a region of land-locked basins where glaciers could form, and afford no opportunity for icebergs to carry away their wealth. In all ages these ice fields melted on the spot and dropped their gold. As tropic conditions came and passed away, gold-laden glaciers melted and others formed in their places, only to drop their hoards. Anyone can see that if those ancient ice ages were produced by the fall of primitive or canopy vapors, then Alaska, from the very nature of world conditions, is a land rich with celestial treasures.

It must be conceded that during the many glacial periods that the earth has witnessed, Alaska was eminently the glacier's home. When canopies revolved about the earth and floated to the northern skies to fall, Alaska's mountains lifted their lofty heads to the sky, and thus above all other northern lands was situated to receive its snowy hoard. When canopies rode on high, the air was under greater pressure, and clouds buoyed in the atmosphere would gather there as now—when conditions were favorable. As glacial winters began in the north world, currents of air must have started in vigorous flight toward the equator. These snow-laden currents, of course, would fall back westward as the earth rotated eastward and lodged on the Alaskan mountains, and the great primal folds of the continent would again become the storage ground for the wealth of canopies. This leads me to further urge the claim that the whole eastern slope of the coast mountains of British America and Alaska is pre-eminently the

LAND OF THE NUGGET.

That mysterious power that forms the crystal, the frost-work on the window pane, the snowflake falling through the air, formed the gold grains and the nugget. The same process that produces the hailstone from watery vapor today at a certain temperature, formed hailstones of gold in ages gone by when a higher temperate prevailed. There was a time when the temperature of the atmosphere was such that mineral rains and mineral hailstones were the order of the day. In the lower air mineral exhalations arose only to condense and fall back. But as they condensed mineral masses formed just as hailstones are now formed. Irregularly rounded in form, after riding as long as they could in the mineral atmosphere they fell back to the earth, and we see countless millions of these in the crust today. Well in the loftier heights, in the steaming vapors, the golden grains and nuggets formed. They rode higher in the primitive atmosphere than the more refractory metals—metals more difficult to vaporize. For this reason they formed a part of the ring system. For this reason they revolved around the earth in canopies with great velocity and moved in spiral paths to the poles, falling there with the very snows that formed glaciers on the Alaskan uplift.

These nuggets have been found in vast quantities in the frozen north, always in placers, and they never came from quartz beds, for the process that is competent to pulverize quartz rock must have ground all quartz nuggets to powder also.

For this reason, and for many others, men cannot rea-

sonably claim that all placer gold was ground out of quartz beds by ice movements, etc. Yet this is the wellknown opinion forced upon us by old-school empiricism. I do not say that nuggets are not found in quartz, but that this rock, as well as porphyry and granite, may contain them, because sky-formed accretions—gold hailstones—falling first from the sky and carried by ice and dropped into forming beds, must yet lie where they fell. I must say, however, that the miner who seeks the sources of placer gold in the hillsides and mountain walls of Alaska will not find them. In his search for them, however, he may find very rich gold-bearing rock, as he does in other lands. The long experience of practical miners should teach the prospector that quartz and its kindred rocks do not moulder down before the frosts of winter and the rains of summer so readily as some have claimed.

One might put quartz under the stamp and possibly get an occasional nugget from it, but would it not be hard on the nugget? I can also conceive that a glacier might push hills aside and obliterate river channels, and even crush and pulverize rock and release its gold, but the process in this case would be hard on the glacier as well as the nugget. But, putting humor aside, many a practical miner, led by the fallacious reasoning of the old school, has spent all his means and worn out his life in efforts to find the virgin lode, because in the valley below a few nuggets were found. When I have seen so much fruitless toil in this direction, I have said why not let the placer speak for itself? Here is a bed of stratified earth plainly formed at the bottom of the sea or a lake. Here are pebbles, boulders, sky-formed accretions, etc., -witnesses representing foreign as well as neighboring formations, and no one who regards this evidence in its true import will put a particle of value on the presence of gold in the placer as an indication that it came from a rock in *situ* in the hillsides above. Now every man should know that every ounce of gold that he finds in a placer, whether in the form of dust or grain or nuggets, combined or uncombined with other matter, was once lifted to the terrestrial heavens. An earth of boiling and raging minerals won't allow any other conclusion. Granting that vast quantities of gold came back in primitive times and became locked in the forming beds, we have no right to say that it all came back before the watery vapor did.

As surely as man saw a vapor canopy reign and fall (and he says he has seen it), so surely have the ages seen vast snowfalls and showers of celestial gold, and every evidence urges the fact into recognition that much of that gold now lies in the placers of the world just as it Alaska is above most regions one of placers, and above most regions a land of glaciers. It is a land of icefilled valleys and wide cañons, whose bottoms are covered with ice of unknown thickness, and yet on the surface of these ice fields lies a soil that in many places support great forests of huge trees. These soil-covered and forest-covered glaciers must be very ancient, and while some of them may have formed as glaciers now form, there are strong grounds for claiming that they were formed as canopies fell. For, in some places where they have exposed walls, not only have seams of earth been found in the solid ice, but mammoth bones and the remains of forests, and in some places the soil on the surface of these ice fields contain nugget gold.

Plainly, the soil-covered and forest-clothed glaciers are very ancient, and for this reason are gold-bearing; and enough of this metal has been obtained from the very glacier itself to prove this to be true. If, then, hot vapors bore gold to the skies and canopy snows bore it back

to the earth, why not mine the glacier itself for the mother lode?

Alaska is a frozen land—a land whose surface only thaws during summer. The earth in many places is known to be frozen hundreds of feet in depth. (See Earth's Annular System, pages 190 to 200.) In Siberia it is claimed that frost and ice in some places extend seven hundred feet beneath the surface. But how could earthy matter freeze to that depth? Everyone who has any knowledge of the temperature of mines, can see an overtowering difficulty here. Suppose the Annular Theory be allowed a voice. Hear what it says on this point:

Under this frozen soil, under the ancient glacier whose age may be reckoned by milleniums, lie the nugget and How in the world did they get there, if golden sands. they were ground out of the rock by glacial action? Were they washed from the rocks in situ, by floods, to the top of the glaciers and made to sink through it to the bottom? If the nugget's home were in the soil that lies on top of the glacier, then the old school might take some satisfaction in the fact. But the fact is, it is just where the annular student wants to find it, and the satisfaction is his. For one hundred thousand years, it may be, Alaska's ten thousand valleys, ice-filled and forest-covered, have concealed their gold deposits, and in all that time the warring elements have not added an ounce of gold, nugget or dust, to those concealed hoards. the grinding ice nor the crushing heel of winter in all that time has added a mite of gold to the hidden wealth under frozen Alaska or frozen Klondyke; and precious little have they ever added to any other golden hoard.

I will grant that the gold found in the talus or soil now covering so much of the perpetually frozen earth in that north land may in part have been derived from the disintegrated rock, but the time has come when this great problem of placer gold in connection with glacial action will receive a radical and merciless overhauling in the light of the molten earth and annular world-making. It may be that Siberian and Alaskan gold may teach the geologist and physicists that they have misinterpreted the geological record from the very first rude lines cut by the chisel of Time on earth's rocky piles.

The overtowering question is: Why is gold found in such vast quantities in the north world? No grinding up of rocks can explain that. If ice crushing explains why we find gold in mountainous Alaska; why has not mountainous Europe given us abundant placer gold? The glacier can't quarry out gold unless it is at hand. There it is under the Arctic circle, and the question is: Why there? Perhaps it is not generally known that more than half the gold gathered in the Russian empire is found under the Arctic circle in *Eastern Siberia*, almost on the threshold of Alaska. Yankee pluck and enterprise are badly needed there, it would seem.

Let it be understood, then, that Alaskan gold as it exists in places that have been sealed for ages under frozen mud and sand, intermixed with layers of ice of great thickness, was not ground from any "mother lode." The very mud, clay, sand, etc., may have fallen with the If snows descended to glaciate a world, they carried immeasurable quantities of mineral sublimations tellurio-cosmic dust. From this fund, I presume, the glacial "till" and "boulder clays" have been derived in greater part. Of course in polar lands they fell with the snows in the frozen state and one can readily imagine depressions filled, valleys obliterated and plains covered hundreds of feet deep with such frozen materials. such frozen materials are known to exist, and in the absence of any other plausible method of accumulation, I assume that the frozen strata were made by progressive canopy falls. Now if this be true time will prove it true, and there I leave it.

I think the northern gold discovery is a wonderful verification of the Annular Theory, but I am not urging the claim that the Alaskan gold field is a marvel to induce gold seekers to rush headlong into the dangers of that land. I am simply using this gold discovery to advance what I am sure is a greater discovery. With this greater discovery the intelligent miner may learn the most valuable lesson, and future generations will know more about these great store-houses of the earth. And now let me whisper in the reader's ear: There must be hidden, in the north land beds, immeasurable quantities of the heavier

HYDRO-CARBONS.

When the earth was a molten sphere, it was a smoking Carbon was one of the most abundant elements of the earth, and it will not take the chemist long to tell what became of that carbon when the earth was boiling up in mineral fury from its depths. That carbon went to the skies, just as unconsumed carbon goes there as smoke from ten million furnaces today. Today, however, in its nascent state the carbon unites with oxygen in the air, and is consumed. But in that primeval atmosphere oxygen had greater affinity for other elements which it greedily devoured and left the carbon unconsumed. Oxygen and hydrogen rushed into combination, so also oxygen with molten iron, calcium, sodium and other minerals. But the unconsumed carbon went aloft amid hot and Now the inevitable result. steaming aqueous vapors. The gas maker will tell us he injects steam into his retort with his carbon to make a hydro-carbon or an oxy-hydro carbon. In this way he forms a number of oily carbon products, burning gas, etc.

But in that day when the Great Chemist put his car-

bons into the retort of retorts and poured superheated aqueous vapors over them, what did He make? If the puny fires of man can today make hydro-carbons—fuel to illumine and burn at will, what infinite quantities did the world's titan retort make? All the hydrogen this world has, all the carbons on the earth and in it, were in the molten world, and when those hot carbon forms came in contact with flaming hydrogen, there is no mistaking the result. Now we begin to see some of the grand results of the mighty energies awakened by a world fur-If we could, by any possibility, measure the oceans of hydro-carbons, such as the oil now running from millions of wells, we might form some idea of what every shining star is doing today. The same furnace that made the oceans and anchored them on high, made all the oils of the earth's rocky beds and anchored them on high also.

These oils went from the earth's annular system over the equator to the polar regions and about the circles, and there they fell. There also fell all the other carbons that the world's great alembic could gather from the fiery mass, and this includes all the coals of the earth. This, of course, is geologic heresy. But it is Annular Law none the less. I say, then, there must be vast beds of petroleum rock in the polar lands, for there was the world's great dumping grounds for all the fire-born products of the primitive earth. When the world's great fund of fuel in the temperate zones shall have been exhausted in the ages to come, in polar lands, both north and south, men will mine not only the metals that now lie there, but they will carry, on the world's great highways, millions of tons of oil and coal from there to other lands.

The fact that the material that formed the oil rock was more easily transported, renders it probable that the greater part of the lighter hydro-carbons was carrried from the poles and and only the heavier ones left there. There, however, is the home of the graphitic carbons and the anthracites, and there they will be found. There must be found the heaviest oils of the earth, and all the heavier hydro-carbons and oxy-hydro-carbons. There must be found the heaviest and the purest coals. I mean coal with the most carbon and the least ash. In fact I would expect coal to be found in both the north and the south polar regions that contain no ash at all. I do not see how all the earth's great fund of carbon could possibly have existed in God's retort of inveterate fire, and and not make all the alotropic forms of carbon from the lightest to the heaviest and purest.

What would my brother geologists think if, in the future, great beds of coal should be found in Alaska which contain little or no ash? Would he still say that all coal is derived from vegetation, which, as all men know, contains ash in abundance? I leave the subject to the test of time, knowing that if men drive me from the rock of the Annular Theory, the Rock will still be where God put it. Suppose the future should reveal fuel carbons imbedded in eternal ice, just as it fell from the skies with canopy snows. Would men say such fuel was once a vegetation? Well, it will be found there, just where the annular student wants to find it, but just where the old-school geologist don't want to find it. When men come to see that all the original carbons of the earth must have come home via the poles, they will see why we have such vast beds of the purest coal under the very Arctic Circle and almost none under the equator, where in all ages vegetation has been king. When men come to see this primitive origin of carbon fuel, they will understand why the old Cambrian beds contained such masses of almost pure carbon long before vegetation existed.

Suppose, now, we were to find the coals graded according to purity and value and quantity in both the northern and southern hemispheres from the equator toward the poles. If this theory be true, in South America and Africa, the best coals and the greatest mass of them should be found in the most southern parts of those countries. Now, so far as the South American coals are witnesses in the case, their testimony is emphatic. The Patagonian coals are far ahead of those in Buenos Ayres, both in quantity and quality, and those in the latter country excel those in Brazil. The nearer the equator the less is the quantity and poorer is the coal. This gradation of coal latitudinally is another rock over which the old-school geologist cannot climb, nor can he get around it.*

Alaska is a stupendous primitive upheaval, and for this reason the purest metals and minerals of all the ages are brought together and within the reach of man. It is the world's great available storehouse. I suppose the reader can now see the meaning of a molten earth. Suppose immeasurable fires had taken no part in the evolution of this globe. By what possible means, then, could the oxygen and hydrogen of the planet have been brought together in the making of oceans? Without the aid of the planet's reducing flames, how could man today get a pound of iron, lead or gold without going into the inmost depths of the earth for it? For these metals must, in that case, have been disseminated in grains and dust all through the mass. For this reason I see Wisdom in

^{*}I cannot pursue this momentous question further in this volume. I have treated it in three chapters in my Earth's Annular System, and the reader who would know more of the primitive and true origin of coal, is referred to that volume. Also to the author's lectures on the "Coal Problem" and the "Waters Above the Firmament," wherein it is treated in all its phases.

a molten world. I see that Vulcan's forge and hammer have reduced the rock-formed earth for man's accommodation. I see those metals all carried to the heavens and held there till the earth grew cold and ready to take them back into its outer crust. Without this world process this planet would not have been fit abode for the sentient races now upon it.

When we recall the fact that all the world's great mineral wealth came back from its celestial anchorage by way of the polar skies; that especially the heavy products of the earth's primeval furnace must largely remain where they fell, we cannot avoid the conclusion that Arctic and Antarctic lands are the metallic and fuel treasuries of the world and of all worlds. When God rocked the infant orbs in their fiery cradles and started suns on their grand courses, it would seem he had man's inventive aims and eternal necessities in view. We now see why stars shine and suns burn. The grand intent of Omnipotence is emblazoned everywhere. In the turning of spheres and bowing of poles there is as much a plan as one can behold in the evolution of a lily or a rose.

We look with amazement upon Saturn and his rings. In the grand and eternal dance of worlds the day must come when men will see these rings no more. As Law presides over the destiny of orbs, the outer rings of an annular system must form into moons and the inner ones into canopies, and canopies must fall and add stratum to stratum, age to age and life to life. Thus the earth and all worlds are lifted from plane to plane. When I see Saturn's and Jupiter's canopies striated with dark bands, and remember that these worlds also were once flaming suns—smoking worlds—how can I avoid the conclusion that I am looking at sooty carbons? What else than unburnt fuel can I find in the whole realm of elements known to man, to wedge into those vapors so brilliantly

white? They are worlds being built up by annular processes—by the fall of canopies, laden with all the mineral and metallic wealth that fire could lift to the skies. For uncounted milleniums, perhaps, canopy dust and vapors, fiery sublimations must fall and build Saturnian and Jovian strata and deepen their oceans. In their dense and heavy atmospheres that dust must fall in all lands, but more largely at the poles than elsewhere. These falls may not be catastrophic, but yet they might be.

The mysterious evolution of Jupiter's canopy becomes, in the light of annular law, the most emphatic and unimpeachable witness of canopy world-making. For thirty years I have watched the stupendous changes of a mineral and metal-laden ocean of vapors, making every effort possible to reach the surface of the planet and that, too, via his poles. Jupiter's canopy is plainly the wreck of an annular system, revolving measurably independently of the planet's own rotation. I fancy Jupiter's "golden age" may be now in the noon of its progress, or it may be its "tertiary time." Certainly it is not a hot world, as is claimed; for the strongest evidence in favor of such a claim fails when tested. But as that canopy is now falling, what vast continents of snows must eventually mass themselves about Jupiter's poles. What deluges must augment its oceans! and this leads me one step further on.

Our oceans say, as they roll their waters up ten thousand river channels, that they are today many fathoms deeper than they were just previous to the last great ice age. If all the ocean waters had fallen in primitive geologic times, the earth having absorbed vast quantities of them, the seashore must have been at a lower level, the world over, than formerly, so that now the rivers would run rapidly and pitch headlong into the sea through high alluvial walls. But where, in the whole earth, do we

find this feature? The ocean is today a vast basin filled to overflowing by modern augmentation. One cannot contemplate the contour of continents as they now exist and philosophically conclude otherwise. Today there sleeps in the very midst of the Pacific ocean a vast continent, once the scene of human activity, as the submerged works of human hands prove. Dana, America's great geologist, said it was a vast sunken continent. But this could not be the case, for if that continent sank the waters would recede from the coasts of the earth and the rivers would pltch into the sea, which they do not. (On this theme see Earth's Annular System, pages 111 to 155.)

But the Law is not done forecasting yet. It declares that the south polar world is also a land of nuggets. deed, I have no hesitation in claiming that if we follow the indications made apparent by the plan of annular evolution, the south world is the greater and richer store-When I recall the great continental house of the metals. casement of Antarctic ice, so far exceeding the northern ice fields in dimensions; when I recall the fact that the great bulk of oceanic waters have gathered about and toward that region, I am led to ask why are these things so? and but one philosophic answer comes in reply. the oceans' waters have gathered in greater quantities about the southern pole it is because they have been attracted thither more than they have been attracted to the northern pole. In other words, the Antarctic world has greater attraction than the Arctic. In other words, a mass of metal that would weigh a pound in the Arctic world will weigh more than a pound in the Antarctic. The pendulum will vibrate more rapidly at the latter I say these things must be so because that region has got possession of the world's great ocean.

When I see our moon lifting a great tidal wave and

dragging it westward in opposition to the radial motion of the earth. I assume that the moon attracts the waters or they would not move toward it. But the moon is nearly 240,000 miles away, and I am forced to admit that the attracting mass of the south world must have the same effect. Well, I see the effect, and the cause is plainly at hand. Now if the superior attractive force of the south world is capable of drawing the oceans thither, then it was capable of drawing more canopy matter thither. Hence, when an earth-ring descended into the atmosphere laden with primitive exhalations, their inevitable tendency was to float more largely southward and to fall more largely in the Antarctic region.

Now men may say this evidence is too slender. however slender, we see how the dial finger points. await the justification of this forecast. When the expedition now fitting for the south polar regions, demonstrates that the pendulum vibrates faster there than at any other part of the earth, then men will see why there are more waters there, and possibly they may admit that there are more of the heavy metals there too. wait for an expedition to settle this problem? that law has already settled it. The waters are there, and they are there according to the law of attraction, and therefore there are more of the heavy metals to attract. The waters are there and therefore the pendulum will vibrate more rapidly there. If I draw my conclusions on slender evidence, what shall I say of the conclusions of the old-school geologists?

We know enough about South American gold, located, as usual, on the east side of the Andes, to predicate a little as to its original source. It is as plain as day, that if the great amount of placer gold on the eastern slopes of the Andes came from quartz, and other rocks of that range, it has no right to be there. If South American

gold came exclusively from the rock beds of the Andes during the ages of denudation and attrition, by all means the west side of that range should be the gold field, which it is not. But where did the ancient inhabitants of Peru get their gold? Were they smelters? Were they quartz crushers? Did they cyanide? The Peruvian placers of amazing wealth, yet unexhausted after unknown centuries of gold gathering, tell the tale.

For millions of years the successive canopies of the south fell as metal-laden, gold-laden snows on the Antarctic continent. Glaciers formed mountain high, and moved as glacier ice, outward toward the sea. Millions of icebergs broke off and floated toward the equator. their way the eastward motion of the rotating earth caused them to fall back to the west, and like the icebergs now lodging on the Labrador coast, these lodged on the east side of the Andean sea bottom, then a ridge sleeping in the deep. Later in geologic time this great mountain range, a continuation of the great Laurentian upthrust of North America, arose from the sea. But icebergs still floated and lodged along its ocean-washed walls. they melted, there they dropped their loads of goldgold nuggets, formed as hailstones are formed today, gold grains, gold dust.

Now will the old school tell us how and why placer gold fields are so exclusively located on the eastern slopes of this great American mountain range? Will they tell us why a mountain range running east and west as some do in North America, is more apt to have placers on its northern than its southern slope? Will they tell us why they do not like to invest in the new school's stock of "whys?"

I want to be understood here. I do not say that there are no very rich lodes in the polar regions. On the contrary, all gold-bearing rocks of all ages, if the theory be true, must be richer than the same rocks are in other regions, but the placers will not lead the miner to the spot. Canopy falls that filled the placers in modern geologic times, filled the rocks as they were forming in other ages. A captious critic has said that the "Vailian theory claims that there is no quartz in Alaska." Vail never made such a claim, but just the reverse. The same must be said of granite and porphyry, and every rock originally formed out of dust sent up from the molten earth, for that dust came home via the poles along with their gold. When, then, I say men cannot find the mother lode in Alaska, I do not say it is not a land of quartz; and when it is said the placer filled with gold does not point to gold-bearing quartz, it is not even intimated that no quartz beds are close by.

The Alaskan miner, it seems to me, need not push into the utmost wilds of Alaska to find gold. From those high lands the glaciers have moved down to the sea along every valley, and supposing the same warm sea waves dashed upon them as they reached the coast, as now dash on those coasts, I see no reason why the whole shore of Southern Alaska is not one great placer. The fact that eastern Siberia is a vast gold placer, points to the fact that all Behring's sea bottom must also be one. further, if there are currents of water dragging the bottom of Behring's strait, carrying off the light particles, it must be leaving the gold behind, and I look forward to the day when ships will find such currents and, anchoring over them, will dredge gold from the deep. Let us remember that the ocean there is a modern innovation that when its waters poured over that land it involved a gold region, and the gold is there still, and every current moving over that submerged shore is carrying its covering away, so that there must be in that sea regions where gold lies stripped of its covering and awaiting the sea-

man's dredge. Find the sea currents of these waters and find gold. Sink deep wells on the coast near the mouths of Alaska's numerous valleys opening toward the sea, and find gold there. Take the Copper River valley as a sample. Why not prospect its mouth as deeply as possible for the gold hidden there? Failing to find what is sought for in that valley, follow the stream up to its sources and over the divide. On the *northern* slope of that divide I would expect to find gold. I would say the same thing of all of Alaska's south-bound streams. the other slope of the divide, gold should be found. makes the region immediately south of the Yukon more a gold region than the region directly on the north of that stream. For the same reason I would expect richer gold lands on the northern slope of the divide between the Yukon valley and the polar sea. In a general way I would expect more placer gold on the eastern and northern slopes than on the western and southern. Then, again, all things being equal, I would sooner look for gold on the concave shore of a stream than on the opposite or convex shore in the elbow of a stream.

The reader can now see that every time a canopy fell and the waters retreated to the sea—when polar snows melted and poured their waters along a thousand valleys, the light materials of earth would be borne away and the heaviest would remain behind where the ice and snow melted. Gold, a very heavy metal, then must to a vast extent lie where it fell. But is it not plain that all these floods of water urging their way to the sea have simply made the ocean what it is today?

"OPHIR'S GOLDEN WEDGE."

I must now bring the work on this volume to a close, though there is one more thought which ought to have had a place herein. That land of fabulous golden hoards, known to Solomon and all the east three thousand years ago—where was it? How in the world has its location passed so utterly from human knowledge, like a dream of the night? Ships laden from that mysterious shore carried gold by the ton to enrich Hebrew temples alone. Persia, Arabia, Greece and Egypt gathered immeasurable wealth in that far-off and now unknown land, and gold was "plenteous as stones." (II. Chron., 1, 15.) It took Solomon's ships three years to make the trip. Away back in the centuries when Karnak, Thebes, Babylon, Mycenæ and Troy shone forth in golden splendor. "Ophir's Wedge of Gold" was the wealth of tribes and the god of nations. I can only say now that I have certainly located that land in the far north.

Had I space in this book for forty pages more, I could bring another phase of the Annular Theory into view, by which it can be plainly shown that the word Ophir was originally a name for the north land. But to make this plain I would have to bring many classic and biblical witnesses into court and thus, far transcend the limits intended for this volume. I must therefore leave the work for other times. However, I will, Den volents publish "Ophir's Golden Wedge" in pamphlet form (32 pages) if the sale of 200 copies at 25c each can be assured. Somewhere in lands now fettered down, it may be for ever, in snows and ice, the ships of Tarshish obtained their gold as well as ivory. In one of the processions bearing ivory, sculptured on Eastern walls, a white bear is seen, and this means much as north world testimony.

As the philosophic student must now see, if the Annular Theory be true, there are some momentous questions which have long since been considered settled, that must in the near future receive a thorough revision. I suppose it will be a long time before such men as those who champion the Crollian theory of terrestrial glaciation, the vegetation theory of the origin of coal, the

quartz rock origin of placer gold, can be convinced that they have the "cart in front of the horse" all the time. To say the least, it is very strange that such eminent men as Lord Kelvin, acknowledged to be the "prince of physicists," cannot see the self-stultifying argument that presents a cold world first and the snows afterward, which is a physical impossibility. Refrigerate a world and you put out the very fire you must have to lift the vapors to the air to form snow. This "prince of physicists" should come home, and learn how canopies fall and how that snows fall first and refrigeration comes in consequence. And yet these men will call this "Vailian nonsense." Well, I have the horse in front, where he should be.

Then that coal problem! This "prince of physicists" only echoes the great world's opinion when he says that vegetation made all the carbon beds (coal veins) of the earth, while it is a fact which every schoolgirl ought to know that vegetation can't make carbon. Carbon makes vegetation! For more than half a century difficulties mountain high have piled up in front of this question. The annular theory sweeps every one of them away, and simply because its gallant steed goes in front.

From all over this land—from the ends of the earth the geological cry goes forth that Alaskan gold rock gave up its gold to the all-devouring glacier to be carried away. Whereas, in all ages, it was the gold-laden glacier and berg that gave the gold to the rock. The innumerable multitude who, at the beck of the old school, sought the mother lode from the placer signs, or sought the placer signs from the mother lode, and so uniformly failed, may yet learn that if the Annular Theory of gold deposition had been pushed to the front fifty years ago, millions of dollars had been saved, and what is more, thousands of valuable lives had been spared. My conscience would sting me if I did not sound the warning. Let the mother

lode alone. No annular student would seek it from placer signs. Keep the horse in front.

Two days ago the writer of these lines, in respose to an invitation, delivered an address before the Southern California Academy of Sciences, held in Los Angeles, Cal. In the course of his lecture he brought to view the remarkable evidence found in legendary thought, which plainly establishes the fact that man saw at least two ephemeral heavens pass away, and was therefore an eye witness to the fall of canopies. When the speaker sat down, one of the most learned men in the audience, a genuine representative of old-school touch-me-not-ism, objected to the theory and made a strong effort to crush it because, as he said, "it is founded wholly upon mythology and theology." As the learned gentleman, however, had the "cart before the horse," as usual, the theory was not crushed.

The author of this theory, from the very hour he made the discovery that legendary thought was connected with canopy processes, has never dreamed that the Earth's Annular System was "founded on mythology and theology." Neither is the canopy conception founded on them, nor can it be. On the contrary, mythology and theology, as human products, are founded on the Earth's Annular System, and on canopy processes. In other words, if the earth never had a ring system or a vapor heaven, mythology and theology would never have presented the features they do today. The ancient Greeks, Romans, Hindus, Egyptian, Japanese and other peoples, would never have preserved the thought for more than 4000 years that an old heaven passed away—that new heavens came to view; that the sun, moon and stars were hidden by a water heaven, if the earth never had rings, and canopies, the wreck of rings. For this reason I say the Annular System is not "founded on mythology,"

but that mythology is founded on the Annular System.

This continual practice of going "wrong end fore-most" and forever in the same old "rut" will bring legitimate fruits, as it has in the past, and I certainly would omit a duty if I failed to put the reader in a way to learn all he can about the great problem of Annular Evolution. I will be pardoned, then, if in these last pages of this volume I devote some space to the character of some of the books that have been published in an effort to support this growing theme.

I am sorry to say I have no more copies of the Earth's Annular System for sale. I have revised, and enlarged it to the extent of two chapters, and the second edition will contain nearly 500 pages. I have never been able to get book publishers and dealers to take any commercial risk in its publication and sale, and I am thus forced to publish it myself. And just as in the publication of the first edition, I must secure enough subscribers before making the venture, to secure me against financial loss. Subscriptions are coming in slowly, but fast enough to show that it must be republished in the near future. The old edition was a book, cloth bound, 5x7 inches, and sold for two dollars, by mail. The new edition will be some larger, same size of type as this volume, elegantly bound in two or more styles and sold for the same price. sons who want to learn the grand and unmistakable "Story of the Rocks" as they testify in behalf of the Earth's Annular System and the reign and fall of canopies, in the building of the earth's crust, the augmentation of oceans, the birth and death of races, and the great polar snowfalls that locked down in eternal death the giant mammals of the earth, can learn the lesson and the true meaning of world stages in that volume. Inviting the reader to send his or her name (but no money until advised), ordering one or more copies when published,

I shall be more than pleased to record it and make pleasant acquaintances.

The Gods Unveiled is the title of the second volume of the Earth's Annular System. I have spent more than ten years in preparing it and it is now ready for the press, but awaiting 1000 names as in the above volume, same type and style and size of page, over 400 pages, price \$2. The reader may not admire the title, but when he shall have finished reading the book, he will say it is properly It proves, so far as the philosophy of dying history can prove anything, that mythology is the fossilized records of canopy times. The rolling canopy is the key. The day must come when many a stronger hand than mine will take this key and unfold to the view of astonished humanity more than a Columbian discovery. it is, I have presented in this volume, as I think, the most undoubted proof that man saw the pure, clear sky come into view as an infant heaven hid by nursing clouds and fed by golden bees (stars) after two ephemeral vapor heavens had been banished by the god of order and law. To one who is interested in this line of study every rage of mythology thus becomes an actual discovery of some-To me it has been one interminable line of thing new. startling revelations. All this is because I certainly have found the key that unlocks this grand storehouse of prim-Mythology is fossilized history, and I aver, itive thought. knowing what I say, that every phase of it has a meaning that the Annular Theory only can interpret. once explained is no longer a myth, and as it is the province of the annular student to explain them, he is by that act converting myth into golden truth.

This may seem like large talk and strong language, but I have pushed this thought far enough into the midnight wilds of antiquity to be conscious of the fact that the grandest canopy processes startled the early races and left in the head and heart of humanity an impress that started undying echoes down the ages. The imagery of canopy scenes—celestial wars between dragon enemies and solar warriors, is ambered in the very words, acts and religions of mankind, as the image of a star is photographed on the astronomer's chart. Seeing these things as I do, I feel that I can do nothing less than desire the student to partake of what has been to me a continual feast.

Eden's Flaming Sword—What Was It? In this pamphlet of 48 pages I have shown that the God of nature has irretrievably closed Eden's gate to man by the canopy's march to the polar north. In the day of Eden's immunities a canopy growing thin revealed a flaming sun on high, surrounded by a flaming halo, "a sword that turned every way." I have shown how the Hebrew cherubim were the same as the Assyrian "kerubi," now known as sun-guards by eastern scholars. This links the Trees of Life and Knowledge with canopy scenes and gives them their first philosophic explanation.

Thus while everyone must admit a physical Eden under physical conditions, with its two "trees" actual physical features on the canopy, the changes wrought in connection with man's expulsion were plainly an inevitable repetition of those telluric transformations chronicled in the geologic column. I think I have shown very plainly what the mysteries of Eden were. The "serpent" receives in this volume its first and only philosophic explanation, while its typical signification is made clear. Here is a fruitful field of thought, which no minister, teacher or student should neglect. Price by mail, 25c.

The Coal Problem, 44 pages, pamplet. Price, 25c. Here are some of the subjects on which it treats: A Smoking World. Peat Bog Fuel. Planetary Belts. Carbon Belts. Jupiter's Oceans. Coal Beds. Graphite Car-

bon Beds in Snow and Ice. Fossil Vegetation in Coal. Oscillation of Sea and Land. Coal an Aqueous Deposit. Equatorial Coals. Southern Hemisphere Coals, etc., etc.

The Great Red Dragon is a pamphlet showing that all races looked to the vapor heavens as the home of the water spirit, and that Dragon was that spirit's name. The evidence on this point is conclusive beyond a doubt. And when we read of a "war in heaven," in which the dragon was vanquished and cast down to the earth, we may rest assured that we have a record of the solar forces in conflict with vapor foes. I have, I think, made this fact very plain. I have but few copies of this book left. It has been revised and enlarged to 40 pages. been more sought for than any other pamphlet, and the new edition will be issued in the near future. mend this volume to the thoughtful attention of all. connection with this monograph is the enlarged picture of the "Serpent Tablet" found in one of the "cliff dwellings" of Southern Colorado. This tablet is the only specimen of hieroglyphs ever found in those ancient dwellings, and it is most valuable because it shows that the cliff dwellers had a system of hieroglyphic in writing, and because it shows that those people saw the march of canopy vapors from the equator to the poles. The tablet is simply a stone volume. The author of these pages has, as he thinks, given its only interpretation, which will be published in the second edition of the Great Red Dragon, with an enlarged picture of the original, sold together for 35c, or each (pamphlet and picture separately) for 25c.

The Deluge and its Cause—Here is one more little volume I will call the reader's attention to, the first the author of this theory ventured to inflict upon the public. It may be the first ever published on this subject. Whether this be so or not, I have no little pride in parading it as a memorial—the conception, in great part, of a

young brain curious to look at the "other side" of things. Published in 1874, it contained at that early day the groundwork of the Annular Theory, in which the polar trend of canopies, laden with metallic exhalations, is set forth as one of the chief agents in effecting geologic changes. I have resolved never to revise it, save to eliminate a few typographical errors, so that all editions have and will be the same identical book so far as it can be, even to type, size, color of cover, etc., as published when tremblingly I sent it forth. Its fate and the immediate fate of its author for publishing it, need not now be told—a monograph of twenty pages sold, as a curiosity, for ten cents.

To keep this theory in view the author has championed it in season and out of season, and the reader may be surprised to learn that the efforts made have cost more in actual outlay of money than has been received in cash returns; but such is a fact, and such it may always be—a serious drawback to the growth of Annular Truth.

All these publications are designed to put the various phases of the Annular Theory before the reader. The end is not yet. The day is at hand when men, who are abundantly more competent than the author of this theory, will conclusively show that all ancient scriptures must be explained according to Annular World Evolution.

Each of the following publications is a witness in favor of Annular World-making.

- 1. The Earth's Annular System.—400 pages, cloth, 5x7 inches, by mail \$2.

 (Now revised and enlarged, and awaiting subscribers for new edition.)
- 2. The True Origin of Coal.—Pamphlet 44 pages 25c.
- 3. Eden's Flaming Sword.—Pamphlet 48 pages, 25c.
- 4. Eden's Golden Cross and Crown.—About 40 pages, 25c. (Awaiting 200 subscribers.)
- 5. The Deluge and Its Cause,—20 pages, 10c.
- 6. The Annular World.—Monthly, 20 pages, 10c.
- 7. True Origin of Oil and Gas.—Leaflet lecture, 10c.
- 8. The Waters Above the Firmament.—Leaflet lecture, 5c.
 - 9. The Great Red Dragon.—30 pages, 25c. (But few copies left. Will be republished.)

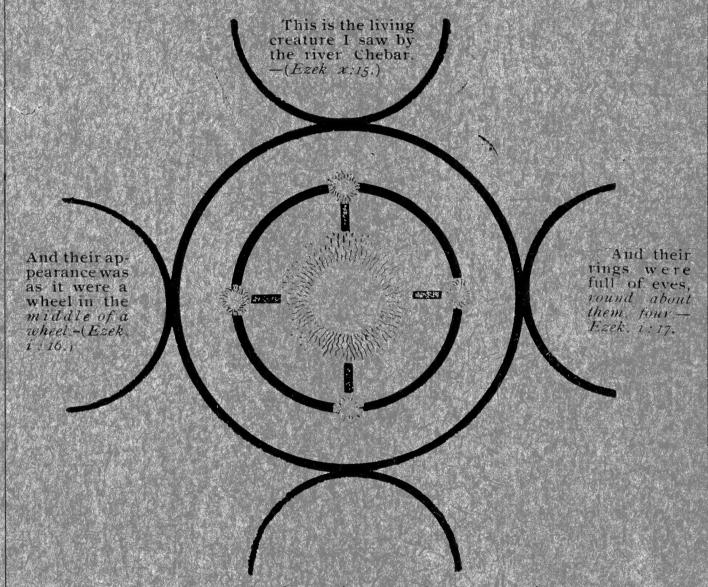
Nos. 1 and 2 are chiefly geological. Nos. 3 and 4 are biblical and legendary. No. 5 is the first essay on the Annular Theory, published first in 1874. No. 6 largely mythological facts. Nos. 7 and 8 are lectures delivered in Ohio in 1886. No. 9 proves the world-serpent of all people to have been the spirit of celestial waters. The whole list of single copies (excluding No. 1) can be had for \$1.25.

I. N. VAIL,
Pasadena, Cal.

Eden's Flaming Sword

---OR---

TWO THOUSAND YEARS BEFORE THE FLOOD.



Here are the perihelia of Eden skies. Such are sometimes seen to-day and called "sun-dogs." Edenic man saw these wheel forms flaming in a vanishing canopy, under sun-guards, which he called Cherubim. "A flaming sword that turned every way." See Ezekiel, first and tenth chapters.

By ISAAC N. VAIL,

Editor of the Annular World; author of The Earth's Annular System; The Deluge and Its Cause; The True Origin of Coal; The Great Red Dragon; The "Waters Above the Firmament"; Petroleum and Its Origin, etc.

PASADENA, CAL. PRESS OF G. A. SWERDFIGER. 1896.

COPYRIGHTED 1806 BY I N. VAIL.